EXHIBIT
#15
DE 17-136

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DOCKET DE 17-136

IN THE MATTER OF: 2018-2020 New Hampshire Statewide Energy Efficiency Plan.

DIRECT TESTIMONY

OF

LESZEK STACHOW
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November 02, 2018

<u>Introduction</u>

Q. Please state your full name?

A. My name is Leszek Stachow, and I am employed by the New Hampshire Public Utilities Commission (Commission) as Assistant Director of the Electric Division. My business address is 21 South Fruit Street, Suite 10, Concord, New Hampshire

Q. Please summarize your education and professional work experience.

A. My educational and professional background is summarized in Exhibit 1.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to review the 2019 Update Plan to the 2018-2020, New Hampshire Statewide Energy Efficiency Plan (NH Saves Report) (hereinafter 2019 Update Plan) and provide recommendations concerning acceptance and/or further action.

Q. How is your testimony organized?

A. My testimony will address the following three issues:

(a) Public Service of New Hampshire d/b/a/ Eversource Energy ("Eversource") progress with the Customer Engagement Platform, (The "CEP")

(b) Further developments with Finance and Funding activities.

(c) Benefits arising from current Work Group activity.

<u>Customer Engagement Platform.</u>

Q What guidance did the Commission Order No 26,095 dated January 2nd 2018 provide with respect to the Customer Engagement Platform?

A. Referencing the Settlement Agreement which it approved, the Commission's Order at page 15 indicated the following:" The Settlement Agreement approves the continuation of

Eversource's Customer Engagement Platform, but allows parties to recommend different strategies for this program if participation does not increase to levels achieved by Eversource in Connecticut and Massachusetts within six months."

Q. With respect to the Settlement Agreement, what actions did Eversource ("The Company") undertake with respect to the Customer Engagement Platform?

A. Eversource agreed that it would make efforts to increase participation, track marketing campaigns, and provide quarterly updates on its marketing campaigns. In addition, Eversource agreed to make relevant adjustments through 2018 to optimize marketing efforts achieve enhanced engagement and increase participation in utility administered energy efficiency programs.

Q. What has been the reported progress of the Customer Engagement Platform during the course of 2018?

A. In response to a Staff data request [1]seeking detail on the growth of usage on the CEP during 2017 and 2018 and a request for an estimate of the cost per residential and C & I customer, Eversource indicated that there had been a significant increase in users during the months of November and December 2017 which coincided with the deployment of an email marketing campaign. Further, Eversource asserted that over 5,000 customers clicked through from the email to the Energy Savings Plan landing page with nearly 2000 new users acquired over the campaign.

Q What was the reported level of activity on the CEP platform between September 2017 and September 2018?

A. According to Eversource, between September 2017 and September 2018, new user traffic totaled 8668 customers out of an Eversource customer total of 510,000 (1.7%). Table 1

[1] DE 17-136(2018), Staff data request 2-009.

below provided in response to Staff data request 2-009 indicates that a significant uptake took place in November and December 2017 when 28.9% of the new traffic was generated. By February that number was effectively halved with an average monthly new customer acquisition from February 2018 to September 2018 of 617.

Table 1: Total new CEP user traffic received for NH per month.[2]

	Sept 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	March 18	April 18	May 18	Jun 18	July 18	Aug 18	Sep 18
NH	135	175	1347	1161	915	632	583	533	898	459	577	713	540

Q. What enhancements were made to the CEP over the course of 2018?

A. According to Eversource, based on the email marketing campaign in NH and the digital advertising campaign deployed in Massachusetts and Connecticut, the company identified several areas of opportunity to drive increased engagement with the CEP tool. Among the reported enhancements were improvement of the user experience and enhancing the company's ability to measure specific tactics to make fiscally responsible marketing investment decisions. This led to the Company reducing its investment in marketing activities while the enhancements were implemented.

Q. Please provide detail of the renewed Eversource CEP marketing campaign in 2018?

A. According to the company response to Staff data request 2-009, in September of 2018 the Company initiated an integrated marketing campaign informed by the following learnings: (1) Paid media channel strategy was optimized based on 2017 performance, (2) Paid media placements were optimized in 2018, and (3) Message testing deployed in 2017 informed the process in 2018. In addition, the company initiated a complementary direct response campaign to reach customers for whom no email address was recorded, articles were featured

[2] DE 17-136 (2018), Staff data request 2-009.

in the customer bill inserts, and where possible cross promotion with other program materials took place.

Q. Did the Company provide cost per user data for both the residential and commercial and industrial customer groups as Staff requested in Staff data request 2-009?

A. In response to the Staff data request, the Company indicated that since inception approximately 14,000 NH customers have logged onto the CEP with a cumulative cost of $1,360,288 resulting in a cost per user of $97.00. The Company did not furnish the costs per residential and C & I customer groups.

Q. What was the Staff finding with respect to CEP costs from the 2017 EERS docket DE 17-136?

A. Based on Company data responses,[3] Staff surmised that costs were apportioned approximately 40% for residential and 60% for C & I customer groups. Based on the budget and numbers of customers per customer group, Staff was able to determine that for the period 2016-2017 the total cost per residential customer logging on was $72.60, while the total cost per C & I customer logging on was $3,211.00.

Regrettably, in the absence of more detailed information from the Company concerning the division of new customers subdivided by residential and C & I classes, it was not possible to replicate the total costs per customer group logging in for any part of the 2018 period.

Q. What are the key findings by Staff?

A. Staff has observed the following:

(1) In 2017, the planned budget for the CEP in 2019 was $616,720. The planned budget for 2019 is now $529,692, a decrease of $87,028.

[3] DE 17-136 (2017); Staff data response 1-011,

(2) There was significant customer uptake during the months of November and December which gradually eroded over the next nine months.

(3) Staff has noted that considerable learnings and new enhancements have taken place in 2018 based on the initial NH email marketing campaign and subsequent refinements from Massachusetts and Connecticut.

(4) Staff noted that the Company reduced its investment in marketing activities while the enhancements were implemented and that a new integrated marketing campaign was commenced- /resumed in September 2018, which this may explain the downturn in customer uptake between January and September of 2018.

(5) Due to the abbreviated schedule for this docket, and an incomplete data response from the Company, Staff was unable to determine the costs per residential and C & I customer in order to compare with the findings from last year.

(6) It appears that a targeted email campaign resulted in significant uptake in November and December of 2017.

(7) The Company admitted that it unilaterally reduced its investment in marketing activities once the decision was taken to incorporate a variety of enhancements.

(8) The Company initiated an integrated marketing campaign in September 2018; however, it is too early to observe any change in the customer uptake rate.

Q. What is the Staff recommendation with respect to the CEP?

A. Due to insufficient data from the Company, Staff is unable to determine whether the costs per residential and C & I user has declined. However, Staff observed a significant upturn in uptake in November and December arising from the email marketing program. Staff further has noted that significant additional learning has taken place over the course of 2018 before the initiation of a new integrated marketing campaign. In light of the November/December performance improvement and the efficacy that has as yet to be determined for the new integrated campaign, Staff recommends that the program be extended for a further 12 months with continued quarterly reporting on progress, and the opportunity for recommended actions throughout the year.

In view of the funds already dedicated to this program on New Hampshire's behalf (cost since inception of $1,360,287.50)[4] Staff recommends that at the end of 2019, the CEP program undergo the same rigorous benefit/cost analysis as is required of all other Energy Efficiency programs with a view to ensuring that the program provides a net benefit to NH ratepayers.

Finance and Funding

Q What guidance did the Commission Order No. 26,095 dated January 2, 2018 provide with respect to the Finance and Funding activities by the utilities?

A. Referencing the Settlement Agreement, the Commission called for the formation of a working group in 2018 to study alternative means for financing and funding EE programs in order to reduce ratepayer burden. The goal was to test and implement various options as soon as they were viable.[5]

[4] DE 17-136 (2018), OCA data response 2-010.
[5] DE 17-136 Order 26,095, 01/02/18, page 16.

Q. What has been the progress of finance and funding discussions between Staff, the utilities and the stakeholders?

A. Between January 24 and July 18, the Finance and Funding workgroup met seven times. The Work Group examined a wide range of issues including the following:

- Examination of all existing financing mechanisms
- Identification of any underserved groups
- Discussions with financing partners on existing progress and ways to increase participation
- Examination of existing customer acquisition process, from contractor perspective
- The case for a Loan Loss Reserve Fund
- The case for broader collaboration on financing
- Donor funding and how to broaden it

Arising from these discussions a series of recommendations followed which Staff is pleased to confirm in large part found their place in the 2019 Update Plan.

Q. **Please describe the recommended updates in residential financing that the utilities have proposed?**

A. (a) In 2018, both New Hampshire Electric Cooperative and Unitil Electric increased their on-bill finance offerings for residential financing from a maximum of $2,000 to a maximum of $4,000. This new level will remain in effect during 2019.

(b) Liberty Gas and Unitil Gas will offer a new on-bill financing option for natural gas customers in 2019. On-bill loans will be available for Home Performance program customers to help cover their portion of a weatherization project up to $4,000.

(c) In order to expand accessibility to financing for moderate income customers, the NH Utilities are proposing to re-focus a 0% moderate income loan offering utilizing existing third party lenders. Staff endorses this initiative to meet the needs of those on moderate income, but as yet, the utilities have not been able to share lender details including interest rates, underwriting standards, income verification procedures and whether to establish a loan loss reserve mechanism.[6]

(d) Following Work Group discussions during 2019 the utilities[7] plan to evaluate whether a loan loss reserve ("LLR") mechanism would be an effective component of a moderate loan offering.

Staff has taken the position that LLRs can open new markets, products, and customers for lenders. LLRs are frequently set up as mission-driven lending to support investment in underserved markets. By having the risk partially offset, lenders are encouraged to reach these underserved markets. Lenders can also expand into new customer bases or appeal to a broader applicant pool by reducing the minimum required credit score, increasing or eliminating the loan-to-value ratio, or increasing the debt-to-income ratio.

The utilities have proposed to test the option for a virtual LLR whereby the loan would be guaranteed by the utility with no capital transferring to the lender unless a loss actually occurred. According to the utilities, such a mechanism would limit the need for any upfront outlay, with the utilities covering any defaults out of the efficiency program budget or by the creation of a set aside in a separate budget line.

Staff understands that the utilities are at present seeking to determine whether lenders will be able to offer more favorable terms under such a mechanism, and if so, what the scope, exact mechanism and contract language would be.

Q. What new provisions have the utilities proposed for Commercial, Industrial, and Municipal customers?

[6] DE 17-136(2018) Staff data response 2-014
[7] Ibid.

A. Beyond the existing on-bill offerings and Smart Start for Eversource and NHEC customers, the Natural Gas utilities propose to create a new on-bill offering for commercial, industrial and municipal customers that would match existing offerings currently made available for electric customers. Accordingly, they will offer zero percent interest on-bill financing loans for qualifying energy efficiency projects. Eligibility will be dependent on a review of the project application and the customer's utility bill payment history. Loan conditions will include: Balance due to be repaid if utility account closed prior to full repayment of the loan with the possibility of early prepayment of loan balance.

For Liberty Utilities Gas customers, the maximum loan per project will be set at $50,000, with a cap per customer of $150,000 per year and with a maximum loan period of 10 years. For Unitil Gas customers, the maximum loan amount will be $15,000 per year with a maximum loan term of 3 years.

Q. What resources will the utilities use to seed the on-bill finance offerings?

A. The primary sources of funding[8] for the on bill offerings are as follows

Table 2. Primary Sources of On-Bill program funding.

Utility	Source of 2019 Funding	Remarks	Total Capital pool for On-Bill Financing($)
Eversource	RGGI Revolving Loan Fund	Originally capitalized at $690,000 and used for residential loans, now will be extended to serve commercial customers	690,000
Liberty Electric	2017 Carry Forward	Will draw $150,000 from its 2017 carry forward funds to add to it balance and enable serving more municipal and small commercial customers.	431,345
Unitil (Electric)	2017 Carry Forward	Plans on adding $375,000 to its existing commercial and industrial on bill financing program, increasing the total pool to $832,000.The focus will be on small and medium businesses without access to low cost capital for which a zero percent interest rate loan may overcome any upfront cost barrier	832,000
Total			1,953,345

Utility	Source of 2019 Funding	Remarks	Total Capital pool for On Bill Financing($)
Liberty Gas	2017 Carry Forward	Will utilize $875,000 of its 2017 carry forward funds to add to its balance for the on bill financing program for residential, commercial and business customers.	875,000
Unitil Gas	2019 LDAC	Will seed its on-bill finance program with $30,000 for residential customers and $53,000 for commercial, municipal and industrial customers investing in energy efficiency projects. Residential loans up to $4,000 will help offset customer costs associated with weatherization.	83,000
Total			958,000

[8] 2019 Update Plan page 33.

As a consequence, an additional $2,911,345 will be made available for on-bill finance activities that will include small business and municipal customers.

Q. How are the utilities planning on leveraging existing state institutions to advance greater investment in energy efficiency?

A. In the 2018-2020 Three Year Plan[9], Staff made the case that either the Business Finance Authority ("BFA") or the Community Development Finance Authority ("CDFA"), as near banking institutions, could become a suitable nexus for stimulating greater investment in energy efficiency in New Hampshire. Following mutual discussions in the Finance and Funding Work Group, the utilities have reaffirmed their willingness to partner further with the CDFA to make loan offerings available to business, non-profit and municipal customers. Like the utilities, the CDFA facilitates energy efficiency projects in the state; however, its smallest loan amount is $30,000. Where there is a gap between the maximum utility on-bill loan offering and CDFA's typical offering, the utilities have undertaken to develop a partnership that will fill that gap and create a loan option for customers. The utilities hope that beyond covering the customer co-pay for NHSaves projects, loans from CDFA may be able to finance additional measures including renewable energy systems and health and safety measures. Staff supports the anticipated greater level of cooperation between the utilities and CDFA and possibility afforded by being able to finance additional measures.

Q. What steps have the utilities taken to access additional funding sources to supplement or enhance the existing energy savings programs?

A. According to the 2019 Update Plan, the utilities plan to develop a NHSaves Partnership Initiative to pursue and access untapped foundation funding for energy efficiency. The utilities will seek to identify potential funding sources that align with the goals of the energy

[9] DE 17-136, 2017 Staff Testimony of Leszek Stachow at pages 14-19.

efficiency programs. Once identified, the utilities propose working with such non-profit partners to apply for foundation or grant funding. This will require a matching of the needs and interests of both the utilities and the funding partner. To this end the utilities plan to hire a consultant to assist with identifying funding sources, areas of alignment with potential no-profit partners and submitting grant applications.

Q. What are Staff's recommendations with respect to this initiative?

A. Staff believes this effort to bring in outside foundation funding to potentially augment or even replace a part of ratepayer funding could be beneficial, however, despite the work of the Finance and Funding Work Group, there is no evidence that the utilities have made significant progress with this initiative during the course of 2018. In response to Staff data request 2-18,[10] the utilities indicated that they had begun investigating funding sources and potential partners in 2018, but that they felt that the effort would be well served by bringing on a consultant with greater expertise in the non-profit and foundation sector. They indicated that such a consultant could be hired in early 2019 to assist with the investigation.

In light of the Work Group discussions that took place in 2018 in this matter, Staff believes that the utilities have been slow in moving forward with this initiative and urges the Commission to encourage the Utilities to accelerate this initiative.

<u>Work Group Activity</u>

Q. How many Work Groups were recommended by the DE 17-136 Settlement Agreement?

A. The Settlement Agreement anticipated the creation of four Working Groups in addition to the on-going Evaluation, Measurement and Verification Work Group with its expanded

[10] DE 17-136 (2018) Staff data response 2-018

participation. The Work Groups and their recommended scope of activities are listed in the table below.

Table 3. Scope of Activities of Work Groups.

Work Group	Scope of activities	Additional Guidance arising from the Settlement Agreement and confirmed by the Commission
Benefit/Cost	• Discuss elements and issues related to New Hampshire's Benefit/ Cost Test, as well as results from the in-progress AESC Study, make recommendations for adjustments in future annual Plan Updates or three-year Plans. • The BC Working Group and the EM&V Working Group shall share information, especially with regard to NEIs and DRIPE •	• Lead discussions of ROP DRIPE, as well as results from the region-wide 2018 Avoided Energy Supply Costs (AESC) Study in which Commission Staff and the Utilities are participating, and make recommendations for adjustments to the Benefit-Cost Model in future annual updates or plans. • The EM&V Working Group shall prioritize the evaluation of income-eligible non-energy impacts as they relate to New Hampshire utilities and customers, and shall provide relevant updates during Quarterly Meetings to inform the Parties and the Benefit/Cost (B/C) Working Group • The BC Working Group shall discuss the following NEI issues (but will not be limited to these items): • Whether it is appropriate to adopt an income - eligible adder for inclusion in the TRC test, separate from the portfolio-wide 10 percent adder adopted in the Plan, and, if so, the level of such low-income adder; • Whether the New Hampshire-specific NEI studies undertaken pursuant to this Settlement should include a separate, evidence-based, income-eligible NEI study; • Whether any adder adopted in this proceeding should be extended through the 2020 program year until such time as the above NEI studies are substantially completed and New Hampshire-specific NEI values are either adopted or rejected by the Commission, and if adopted, implemented in a timely manner. • The B/C Working Group shall keep the EM&V Working Group informed

		about discussions and recommendations.
Lost Based Revenue	• Convene in 2018 and shall focus on kW savings in the Commercial and Industrial sector for use in calculating LBR for measures installed in 2019 and forward. • Consider the general impact of customer peak, and the general impact of demand charge ratchets. • The LBR Working Group will make recommendations for consideration for inclusion in the 2019 Plan Update.	• LBR from measures installed in 2019 and forward shall consist of separate average distribution rates based upon the kWh and kW components, but incorporating appropriate kW savings value • Consider the general impact of customer peak, and the general impact of demand charge ratchets.
Finance and Funding	• Research potential funding and financing mechanisms. • If viable options are found, the Working Group shall work with the Utilities to test procurement strategies and will make recommendations for incorporation in annual Plan Update filings and in the 2021-2023 Plan.	• N/A
Performance Incentive	• Review potential Performance Incentive calculation methodologies with the goals of promoting achievement of New Hampshire's EERS goals • Make recommendations for implementation in the 2020 Plan Update.	• The Performance Incentive calculation included in the Plan should be approved and shall remain in effect for 2018 and 2019 • Study metrics to cover income eligible participation and peak load reductions.

Q. What have the utilities proposed as the strategy going forward for the Work Groups?

A. The utilities have first indicated that the Work Groups have met for a total of 27 times from January to July. They have confirmed that progress was made during these meetings and that in some cross-cutting cases areas of conversation were overlapping. They have therefore recommended at a high level that going forward the venue for all cross-cutting topics should be the EERS Quarterly meetings.

More specifically they have suggested that in light of the work already completed by the work groups, that going forward the frequency of work group meetings should be as follows:

(a) Benefit/Cost Work Group: Closed after final meeting in September 2018. EM& V Work Group to manage remaining items.

(b) Lost Based Revenue Work Group: No need to continue into 2019, closed.

(c) Finance and Funding Work Group: Going forward, quarterly meetings of this Work Group.

(d) Performance Incentive Working Group: Complete review of utility proposal by end of the first quarter of 2019. The Utilities have proposed a June 2019 end date.

Q. What is the Staff position with respect to the Work Groups?

A. Staff's understanding of the current status of the Work Groups is compiled in the table below.

Table 4. Status of Work Groups as compiled by Staff.

Work Group	Issue status
Lost Based Revenues	Work Group closed with no further action in 2019.
Finance and Funding	In view of the progress achieved and need for further investigation going forward, quarterly meetings of the work group will suffice.
Benefit /Cost	Unresolved issues include: • NEIs from the cross-cutting study, including the value(s) and the form (% adder, $/kWh, $/MMBtu, $/unit, etc.); • Low income NEIs from the low income NEI study, including the value(s) and the form (% adder, $/kWh, $/MMBtu, $/unit, etc.); and • Review the cost-effectiveness test taking into consideration the National Standards Practice Manual to determine if any changes should be made.
Performance Incentive	Unresolved issues include: • PI Formula Replacement: Two alternatives under consideration are the MA approach involving two components: savings (61.5%) and value (38.5%) based on dollars instead of kWh; and VT's approach with separate quality performance indicators (QPI's) involving separate weighting and scoring of individual performance metrics, or variations thereof.

	• Revisit basing PI on budgeted program spending rather than actual program spending. • Consider eliminating the current focus on just lifetime savings (formula based) to be replaced by weighing both lifetime and annual savings. (VEIC has suggested a 60/40 split.) • Consider switching from a sector savings approach to a portfolio savings approach. • Design of a peak load reduction metric: awaiting final results of EM&V studies to be completed in 2019. Also need to review the progress of MA's peak load reduction pilot project initiated in 2018. • Design of a low income metric to incentivize greater program participation in that sector. • Discuss the need for, and potential design of, a metric to promote electrification/energy optimization.

Staff can support sun setting the Lost Base Revenue Work Group and reducing the frequency of the Finance and Funding Work Group to quarterly meetings, however there appear still to be numerous unresolved issues that relate to both the Benefit/Cost and Performance Incentive Work Groups. Staff is not compelled that moving cross cutting issues to quarterly meetings will give them an adequate airing, and Staff does not believe that remaining B/C issues should be addressed in the EM & V Work Group alone.

Staff is most concerned that a transparent process prevails. Staff can cite the current success of the four work groups resulting in resolution of almost all LBR issues, significant progress achieved in Funding and Financing and overall, a much better exchange of views between parties and better understanding and respect for each other's position. Staff believes that the costs of the existing work group regime pale in comparison with the number of issues where agreement has been reached, forestalling the need for extensive and expensive hearing time.

Q. What is Staff's recommendation in the matter of frequency of Work Groups?

A. Staff recommends that the Commission approve the closure of the Lost Based Revenue Work Group. Staff also recommends that the frequency of the Finance and Funding Work Group meeting be limited to once a quarter, but separate from the EERS Quarterly Meeting.

Staff believes that the scope of both remaining Work Groups was defined and agreed by the participants early on in the Work Group process and that a number of issues remain to be examined (see above) and, where possible, resolved. Thus, Staff recommends that commencing in January, the frequency of both the Benefit/Cost and Performance Incentive Work Group meetings continue once per month until terminated by mutual agreement.

Q. Does this complete your testimony?

A. Yes it does.